

# DH-TPC-BF1241-HTM

## Thermal Temperature Monitoring Camera



- 256 × 192 Uncooled VOx focal plane detector
- Athermalized lens (thermal camera), focus-free
- Smart linkage with strobe light & audio
- Temperature accuracy  $\pm 0.5^{\circ}\text{C}$
- Temperature measurement range:  $30^{\circ}\text{C}$  to  $45^{\circ}\text{C}$
- IP67; PoE; Micro SD storage

### System Overview

Featuring two video channels, it can realize the high accuracy temperature measurement. This series is designed for preliminary temperature screening.

### Technical Specification

#### Thermal

Max. Resolution	256 × 192	
Pixel Pitch	12 $\mu\text{m}$	
Spectral Range	8 $\mu\text{m}$ –14 $\mu\text{m}$	
Thermal Sensitivity (NETD)	$\leq 40\text{mK}@f/1.0$	
Focal Length	3.5 mm	7 mm
Field of View	H: 50.6°, V: 37.8°	H: 24°, V: 18°
Focus Control	Fixed	
Aperture	F/1.0	
Digital Detail Enhancement (DDE)	Yes	
AGC	Auto; Manual	
Noise Reduction	2D NR; 3D NR	
Image Flip	180°	
Temperature Measurement Range	$30^{\circ}\text{C}$ to $45^{\circ}\text{C}$ ( $86^{\circ}\text{F}$ to $113^{\circ}\text{F}$ )	
Temperature Accuracy	$\pm 0.5^{\circ}\text{C}$ when the environment temperature is $10^{\circ}\text{C}$ to $30^{\circ}\text{C}$	

#### Visible

Image Sensor	1/2.8 inch CMOS	
Max. Resolution	2336 × 1752	
Pixel	4MP	
Electronic Shutter Speed	1/30000s–1s	
IR Illuminator On/Off Control	Auto; Manual	
Focal Length	4 mm	8 mm
Aperture	F/1.6	F/2.0
Field of View	H: 84°, V: 45°	H: 40°, V: 22°
Focus Control	Fixed	
Close Focus Distance	1.0 m (3.28 ft)	2.5 m (8.2 ft)
BLC	Yes	
WDR	Yes	
HLC	Yes	
White Balance	Auto/Manual/Indoor/Outdoor/Tracking/Sodium lamp/Street lamp/Natural	
AGC	Auto; Manual	
Noise Reduction	2D NR; 3D NR	
S/N Ratio	$\geq 55$ dB	
Region of Interest (RoI)	Yes	
Image Flip	180° mirror	
Exposure Compensation	Yes	

#### Video and Audio

Video Compression	H.265/H.264M/H.264H/H.264B
Resolution	<p>Thermal: Main Stream: 1280 × 960 (1.3M) /XVGA (1024 × 768) /VGA (640 × 480) /256 × 192, 1280 × 960 by default Sub Stream: VGA (640 × 480) /256 × 192, 256 × 192 by default</p> <p>Visual: Main Stream: 2336 × 1752/1080P (1920 × 1080) /720P (1280 × 720) /D1 (704 × 576), 2336 × 1752 by default Sub Stream: 720P (1280 × 720)/D1 (704 × 576) /CIF (352 × 288), 352 × 288 by default</p>
Frame Rate	<p>Thermal 50Hz: (main stream) 1fps–25fps adjustable, 25fps by default; (sub stream) 1fps–25fps adjustable, 15fps by default 60Hz: (main stream) 1fps–30fps adjustable, 30fps by default; (sub stream) 1fps–30fps adjustable, 15fps by default</p> <p>Visual 50Hz: (main stream) 1fps–25fps adjustable, 25fps by default; (sub stream) 1fps–25fps adjustable, 15fps by default 60Hz: (main stream) 1fps–30fps adjustable, 30fps by default; (sub stream) 1fps–30fps adjustable, 15fps by default</p>
Audio Compression	G.711a; G.711mu; PCM

## Network

Protocol	HTTP; HTTPS; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS; UPnP; NTP; Multicast; SFTP; 802.1x;
Storage	Micro SD card (512G)
Interoperability	ONVIF; CGI; DAHUA SDK
Browser	IE: IE8 and the later, and explorer with IE core Google: 42 and the earlier Firefox: 42 and the earlier
User/Host	10users at most
Security	Authorized username and password; attached MAC address; encrypted HTTPS; IEEE 802.1x; controlled network access

## Certification

Certifications	CE: EN55032:2015; EN61000-3-2:2014 FCC:CFR 47 FCC Part15 subpart B; ANSI C63.4-2014
----------------	----------------------------------------------------------------------------------------

## Port

Network	1 10M/100M Ethernet port (RJ-45)
Audio Input	1
Audio Output	1
Alarm Input	1
Alarm Output	1
RS-485	1 pair

## Power

Power Supply	12V±20% DC/POE
--------------	----------------

Power Consumption	Basic: <6.5W Max: <13W
-------------------	---------------------------

## Environment

Operating Temperature	10°C to +30°C (50°F to 86°F)
Operating Humidity	≤93%@40°C (104°F)
Protection	IP67

## Structure

Product Dimensions	122.5 mm × 122.5 mm × 107 mm (4.82" × 4.82" × 4.21")
Packaging Dimensions	3155 mm × 155 mm × 135 mm (6.10" × 6.10" × 5.31)
Net Weight	≤0.85 kg (1.87 lb)
Gross Weight	≤1 Kg (2.20 lb)

## Ordering Information

Type	Part Number	Description
	DH-TPC-DF1241P-D3F4-HTM	Thermal: 256 × 192 3.5 mm lens Visible: 4MP 4 mm lens
	DH-TPC-DF1241N-D3F4-HTM	
	DH-TPC-DF1241P-D7F8-HTM	Thermal: 256 × 192 7 mm lens Visible: 4MP 8 mm lens
	DH-TPC-DF1241N-D7F8-HTM	
Accessories	VCT-999(Optional)	Tripod
	DH-PFB220C+PFA106 (Optional)	Celling-mount bracket+Adapter plate
	PFM320D (Optional)	12V 2A Power Adapter

## Dimensions (mm[inch])

